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QUARTERLY ACTIVITY REPORTS AND FINAL TECHNICAL REPORT FOR  
GRANT NO0014-91-J-2008

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2-27-92

The Grant starts at Feb 18 1991. The " Statement of Work"  
for the project is attached to this document.

The first 3 month period: February through May.

Here the main effort has been on interpretation and  
organization of the data from the two SAXON experiments,  
The SAXON experiment at Chesapeake Lighthouse, 1988, and  
the SAXON at ForschungsPlattform Nordsee in 1990.

Finn Hansen from the group participated in a Saxon  
Workshop at Scripps in the beginning of the period,  
presenting the data analysis from the SAXON FPN data (  
Hansen and Larsen, 1991). On basis of this presentation  
the final description of the data analysis was submitted  
to Peter Lobemeier, the project organizer, in August  
(Hansen and Geernaert, 1991)

The second 3 month period: June through August.

In this period the main effort has been concentrated on  
planning and carrying out the experiment on the relation  
between sea state as reported by stereo photography and  
simultaneously measured atmospheric turbulence structure  
as measured by a sonic. This experiment was carried out  
from the pier of Scripps in San Diego, throughout the  
month of july, and although the wind was somewhat below  
the expected and hoped for, several interesting data sets  
are now under analysis.

In this period also analyses on data from the SAXON 1988  
experiment was reported at the IAPSO meeting in Vienna,

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16-23 August (Larsen 1991, and Hansen and Larsen, 1991). Results from the SAXON 1990 were used as well in talk of Gary Geernaert during the meeting.

The third 3 month period: September through November.

This period has mostly been for analysis and interpretation of the new data set from the Scripps experiment and evaluation of ideas for further analysis and interpretation.

The fourth 3 month period: Dec 1991 through Feb 1992.

In this period no work has been conducted on the project, due to pressing demands from other projects.

#### Conclusion

At the end of the grant period the following data sets are under analysis. Primary aim of the analysis is indicated in parenthesis:

- \* The SAXON 1988 Experiment( Modulated wave spectra and zo)
- \* The SAXON 1990 Experiment( Intermittency and stress directions related to wave field)
- \* The Scripps 1991 Experiment( Instantaneous stress and wave field relations)

It is the hope that several publications will appear within the subjects next year.

#### References

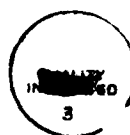
Hansen, C and S.E. Larsen (1991) " Wind drag by short steep waves on slowly varying wind seas" Presented at the IAPSO General Assembly ,Vienna, 16-23 August  
Hansen, F, Aa, and S.E. Larsen (1991) " Preliminary analysis of the atmospheric turbulence data taken over the North Sea during the 1990 SAXON-FPN Experiment" Presented at the SAXON workshop, Scripps, CA, Feb 1991.

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Hansen, F.Aa and G. Geernaert(1991) Final analysis of the atmospheric turbulence data taken over the North Sea during the 1990 SAXON- FPN Experiment. Submitted to the final data report for the SAXON 1990 experiment.

Larsen, SE. "Roughness and the wave spectrum" , presented during the IAPSO workshop on " Wave dependence of momentum fluxes across the sea surface" Vienna, 22-23 Aug.)

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Statement A per telecon Gary Geernaert  
ONR/Code 1241  
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NWW 4/20/92